

High Speed Rail

April 2013

On Thursday 11 April 2013, Minister for Infrastructure and Transport, the Hon. Anthony Albanese MP released the Phase Two Report of the High Speed Rail (HSR) study.

Minister Albanese’s press release is available [here](#).

Contents

Background	1
Phase One Report.....	1
Phase Two Report	3
Consultation.....	6
Support	6

Background

On 5 August 2010 the Hon Anthony Albanese MP, Minister for Infrastructure and Transport, committed \$20 million to undertake a strategic study on the implementation of a HSR network on the east coast of Australia.

The two-part study, “Moving Forward with High Speed Rail,” informs the Australian Government, the ACT and state governments’ consideration of next steps for HSR in Australia. The study was undertaken in two phases and was managed by the Department of Infrastructure, Transport, Regional Development and Local Government.

The [Terms of Reference](#) for the study were released on 31 October 2010.

The report of Phase One of the study, which was released on 4 August 2011, considered possible route and station options, providing the basis for transit times and construction costs. Phase two of the study, released on 11 April 2013, determined optimum route alignment, identified patronage levels, developed cost estimates and investigated financing options.

Phase One Report

A consortium led by leading global consultancy AECOM Australia and comprising KPMG, Sinclair Knight Merz and Grimshaw Architects was appointed to undertake Phase One of the study. Their Report was released on 4 August 2011.

The key findings of the Phase One preliminary study were that an east coast HSR network would:

- Cost between \$61 billion and \$108 billion to build and involve laying more than 1,600 kilometres of new standard-gauge, double-track.
- Achieve speeds of up 350 kilometres per hour and offer journey times as low as 3 hours from Sydney to Brisbane, and just 40 minutes from Sydney to Newcastle.
- Carry around 54 million passengers a year by 2036 including, for example, about half those who would have flown between Sydney and Melbourne - currently the world's fifth busiest air corridor.
- Offer competitive ticket prices, with one way fares from Brisbane to Sydney costing \$75 - \$177; Sydney to Melbourne \$99 - \$197; and \$16.50 for daily commuters between Newcastle and Sydney.
- Cut carbon pollution, with emissions per passenger a third of what a car emits and each full train - 450 passengers - equivalent to taking 128 cars off the road.

Corridors

The Phase One study short-listed a number of corridor options for further analysis Phase Two. The shortlisted corridors were:

Table 1: Shortlisted Corridors

Segment	Shortlisted Corridors	Length (Km)	Approx. Cost \$Billion (2011 Dollars)	Travel Times	
Brisbane - Newcastle	Direct Corridor via	676	21.7 - 35.9	2 hrs 10 mins	3 hrs
	Direct Corridor via Gold Coast	701	24.9 - 40.6		
	Coastal Corridor via Beaudesert	701	20.0 - 27.8		
	Coastal Corridor via Gold Coast	706	22.2 - 31.7		
Newcastle - Sydney	Central Coast Corridor	120	10.7 - 17.9	40 mins	
Sydney - Canberra	Hume Highway Corridor via Southern Highlands	271	10.9 - 19.2	1 hr	3 hrs
	Princes Highway Corridor via Wollongong & Southern Highlands	290	15.0 - 24.5		
Canberra - Melbourne	Hume Highway Corridor via Wagga-Wagga and Albury-Wodonga	552	19.5 - 25.6	1 hr 50 mins	
	TOTAL	1,619 - 1,668	\$61 - \$108 billion		

Stations

The Phase One report also shortlisted a number of station location options for further consideration in the Phase Two study. These options were:

- Roma Street Station and South Bank in Brisbane.
- Central Station, Eveleigh, Homebush and Parramatta in Sydney.
- Southern Cross Station and North Melbourne in Melbourne.
- Civic and Canberra Airport in Canberra.

Patronage demand analysis suggests that central business district (CBD) locations would be the major trip generator and attractor in each city. Peripheral stations were considered for Brisbane, Sydney and Melbourne, typically located towards the urban boundary where there is good access to the arterial road network.

Sydney and Melbourne airports have not been short-listed because initial patronage demand forecasts indicate most HSR demand would be for travel to the CBDs, rather than to airports.

The following regional areas have sufficient size and demand to warrant a regional or parkway HSR station, although other regional station opportunities may exist:

- Brisbane to Newcastle: Gold Coast, Far North Coast, Northern Rivers, Mid North Coast
- Newcastle to Sydney: Central Coast
- Sydney to Canberra: Southern Highlands, Illawarra
- Canberra to Melbourne: Riverina, Murray, Goulburn Valley

HSR demand is relatively insensitive to the precise location of regional stations if appropriate access is provided between the nearest cities or towns and the HSR station.

The full report of the Phase One study is available [here](#).

Phase Two Report

The final report of the study was released by Minister Albanese on 11 April 2013. This report was also prepared by AECOM together with its sub-consultants Grimshaw, KPMG, SKM, ACIL Tasman, Booz & Co and Hyder. This report made a number of key findings regarding the financing, alignment and timeframe of a possible HSR development. Those key findings are:

Definition of the preferred HSR system

- The HSR network would comprise approximately 1,748 kilometres of dedicated route with four city centre stations, four city-peripheral stations (one in Brisbane, two in Sydney and one in Melbourne) and 12 regional stations.
- To meet expected demand, the HSR system would offer a combination of services, including direct express services and limited stop services.
- The dedicated HSR network would need to be integrated into the hubs of existing urban public transport systems and road networks to maximise its connectivity with other transport networks.

Cost of constructing the HSR system

- The estimated cost of constructing the preferred HSR alignment in its entirety would be about \$114 billion (in 2012 terms), comprising \$64 billion between Brisbane and Sydney and \$50 billion between Sydney, Canberra and Melbourne.

Forecast HSR demand

- Between 46 million and 111 million passengers are forecast to use HSR services for intercity and regional trips, if the preferred HSR network were fully operational in 2065, with a central forecast of 83.6 million passengers per year.

Staging the development of HSR

- The optimal staging for the HSR program would involve building the Sydney-Melbourne line first, starting with the Sydney-Canberra sector. Subsequent stages would be Canberra-Melbourne, Newcastle-Sydney, Brisbane-Gold Coast and Gold Coast-Newcastle.

Table 2: Commencement and operational milestones for optimal staging

Stage	Main construction commences	Operations commence
Sydney-Melbourne line		
Sydney-Canberra	2027	2035
Canberra-Melbourne	2032	2040
Brisbane-Sydney line		
Newcastle-Sydney	2037	2045
Brisbane-Gold Coast	2043	2051
Gold Coast-Newcastle	2048	2058

- It is possible the program could be accelerated, with the Sydney-Melbourne line operational by 2035. In this case the Sydney-Canberra stage could be operational by 2030.

Table 3: Commencement and operational milestones for accelerated staging

Stage	Main construction commences	Operations commence
Sydney-Melbourne line		
Sydney-Canberra	2022 (earliest possible start)	2030
Canberra-Melbourne	2027	2035
Brisbane-Sydney line		
Newcastle-Sydney	2032	2040
Brisbane-Gold Coast	2038	2046
Gold Coast-Newcastle	2043	2053

Financial assessment

- The HSR program and the majority of its individual stages are expected to produce only a small positive financial return on investment.

- Governments would be required to fund the majority of the upfront capital costs.
- If HSR passenger projections were met at the fare levels proposed, the HSR system, once operational, could generate sufficient fare revenue and other revenue to meet operating costs without ongoing public subsidy.
- HSR fares adopted for the study have been assumed to be comparable to air fares on the inter-capital routes, and it would appear HSR could sustain higher fares.

Economic assessment

- Investment in a future HSR program could deliver positive net economic benefits.

Environmental and social assessment

- The preferred HSR alignment has been selected to avoid major environmental and social impacts. The residual impacts on natural environments and heritage can be managed by appropriate mitigation and, where necessary, offsets.

Broader impacts of HSR

- Aligning public policies, programs and capabilities across Australian Government, state/territory government and local government agencies as part of a corridor regional development concept would be necessary to realise the full benefits of HSR.

Implementing a future HSR program

- Both the public and private sectors would play a significant role in the planning and implementation of a future HSR system.
- The key risks to the HSR program and its successful performance are common to all major greenfield infrastructure projects; most notably, a lack of certainty about future demand and revenues, and the potential for cost over-runs during construction.

Key public policy issues for a decision to proceed

- Whether to proceed with planning for a future HSR program must necessarily be a policy decision, taking account of many factors that cannot be known with certainty, and in the context of risks which cannot be perfectly controlled.
- As in all publicly-funded infrastructure projects, the balance between public benefit and public cost should be considered.
- A related policy issue is the extent to which the initial capital costs of an HSR program should be recovered from users.



The Phase Two report is available in full, [here](#).

Consultation

Following the release of the Phase Two report, Minister Albanese initiated a comprehensive program of public consultation.

The HSR Unit at the Department of Infrastructure, Transport, Regional Development and Local Government will now embark on detailed consultations with industry, local governments and community groups.

Minister Albanese has established a high level HSR Advisory Group to work along with the HSR Unit in directly advising the Government on key industry and community issues arising out of the report. Members of the Advisory Group are:

- **Lyn O'Connell (Chair)** - Deputy Secretary, Federal Department of Infrastructure and Transport
- **Tim Fischer AC** - Former Australian Deputy Prime Minister (1996–1999) and former Ambassador to the Holy See (2008–2012)
- **Jennifer Westacott** - Chief Executive, Business Council of Australia and former Director-General of NSW Department of Infrastructure, Planning and Natural Resources
- **Sue Holliday** - Former Director General of NSW Planning (1997–2003) and current member of the Urban Policy Forum
- **Peter Newman** - Professor of Sustainability at Sustainability Policy Institute of Curtin University and Infrastructure Australia Board member
- **Bob Nanva** - National Secretary, Rail, Tram & Bus Industry Union
- **Jenny Dowell** - President Northern Rivers Regional Organisation of Councils

A Ministerial Advisory Group has also been established, charged with coordinating the next steps for HSR across jurisdictions. Members of the Ministerial Group are:

- **Scott Emerson** - Queensland Minister for Transport and Main Roads
- **Terry Mulder** - Victorian Minister for Public Transport and Roads
- **Gladys Berejiklian** - NSW Minister for Transport
- **Simon Corbell** - ACT Minister for the Environment and Sustainable Development

Minister Albanese has also invited feedback from the general public on the Phase Two report. Feedback can be provided until 30 June 2013 via an online form, available [here](#). For other enquiries and additional feedback, the Department can be contacted at highspeedrailstudy@infrastructure.gov.au.

Political Support

In releasing the reports of each phase of the study, Minister Albanese has noted that while the Government would continue to investigate HSR as a future policy option, at this stage implementing HSR is not a policy commitment of the Australian Labor Party, and funding would not be allocated toward the project in the upcoming Federal Budget.

The Australian Greens support HSR, and have called for a High Speed Rail Authority to be established to begin implementing the project.

In the lead up to the 2010 Federal Election, the Coalition followed Labor’s lead by announcing it would also commission a HSR feasibility study. However following the release of the Phase Two Report, Coalition Transport Spokesperson Warren Truss indicated that the \$114 billion estimated cost would be a “huge barrier” to its implementation.ⁱ

ⁱ “Albanese call for debate on High Speed Rail: <http://www.abc.net.au/news/2013-04-11/government-to-release-high-speed-rail-report/4621880> 11 April 2013